APPENDIX A –

STATUS OF CLAIMS AND SUPPORT FOR CLAIM CHANGES PURSUANT TO 37 C.F.R. § 1.173(c)

Claim	Status	Indication of Support in the Disclosure
1	pending	Column 9, lines 22-35, column 14, lines 7 to 67 and column 15, lines 1 to 24 at Example 1, describes the process.
2	canceled	Column 8, lines 24-39 and lines 56-61 describe the process.
3	canceled	Column 8, lines 24-39 and lines 62-63, and column 9, lines 16-18 describe the process.
4	canceled	Column 8, line 63 describe amino as most preferred and column 9, lines 16-18 describe that when Q is NH_2 the amidine can be in a salt form.
5	canceled	Column 8, line 63 describes that amino is most preferred..
6	canceled	Column 9, lines 16-17 describe that when Q is NH_2 the amidine can be in a salt form.
7	canceled	Column 9, lines 16-18 describe that when Q is NH_2 the amidine can be in a salt form, for example a salt of a mineral acid such as the hydrochloride.
8	canceled	Column 8, lines 64-65 describe a reaction temperature range of the process.
9	canceled	Column 8, lines 64-65 describe a reaction temperature range of the process.
10	canceled	Column 8, lines 64-65 describe a reaction temperature range of the process.
11	canceled	Column 9, lines 20-21 describe a temperature range of the process.
12	canceled	Column 8, lines 62-63 describe that Q can be hydroxyl.
13	canceled	Column 8, lines 62-63 describe that Q can be thiol.
14	withdrawn	Column 8, lines 30-38 and column 10, lines 41-42 describe the intermediate compounds.
15	withdrawn	Column 10, lines 41-45 describe the intermediate compounds.
16	withdrawn	Column 8, line 63, column 9, lines 16-18, and column 10, lines 41-45, describe the intermediate compounds.
17	withdrawn	Column 8, lines 62-63 and column 10, lines 41-45 describe the intermediate compound with amino being most preferred..
18	withdrawn	Column 8, line 63, column 9, lines 16-18 and column 10, lines 41-45 describe the intermediate compound.
19	withdrawn	Column 10, lines 41-45 describe the intermediate compounds.

Claim	Status	Indication of Support in the Disclosure
20	withdrawn	Column 10, lines 41-45 describe the intermediate compounds.
21	withdrawn	Column 8, lines 43-53 describe the intermediate compound of formula (III)..
22	withdrawn	Column 10, lines 51-63 describe formula (IV).
23	withdrawn	Column 10, lines 51-63 describe formula (IV) wherein R is C_{1-4} alkyl.
24	withdrawn	Column 10, lines 51-63 and column 15, lines 52-63 describe the compound of formula (IV) wherein R is methyl.
25	pending	Column 9, lines 22-34, column 14, lines 7 to 67, and column 15, lines 1 to 24 at Example 1, describe the process.
26	pending	Column 9, lines 22-35, column 14, lines 7 to 67 and column 15, lines 1 to 24 at Example 1, describe the process.

APPENDIX B – CLEAN SET OF ALL PENDING CLAIMS

1. (twice amended) A method of preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]-benzodiazepine comprising the following steps:

A) preparing 2-amino-5-methylthiophene-3-carbonitrile by mixing sulfur, propionaldehyde in dimethylformamide, then adding triethyl amine, then adding malononitrile;

B) preparing 2-(2-nitroanilino)-5-methylthiophene-3-carbonitrile from the reaction product of step (A) by reaction with a slurry of sodium hydride dispersed in oil in tetrahydrofuran and 2-fluoronitrobenze;

C) preparing 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride from the reaction product of step (B) by reacting with a slurry of 2-(2-nitroanilino)-5-methyl-thiophene-3-carbonitrile in ethanol and a solution of anhydrous stannous chloride in hydrochloric acid;

D) preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine by refluxing the reaction product of step (C) with a mixture of N-methylpiperazine, dimethylsulphoxide and toluene.

2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (withdrawn)
15. (withdrawn)
16. (withdrawn)
17. (withdrawn)
18. (withdrawn)

19. (withdrawn)

20. (withdrawn)

21. (withdrawn)

22. (withdrawn)

23. (withdrawn)

24. (withdrawn)

25. (new) A method of preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]-benzodiazepine comprising the following steps:

A) preparing 2-amino-5-methylthiophene-3-carbonitrile by mixing sulfur, propionaldehyde in dimethylformamide, then adding triethyl amine, then adding malononitrile;

B) preparing 2-(2-nitroanilino)-5-methylthiophene-3-carbonitrile from the reaction product of step (A) by reaction with potassium carbonate or lithium hydroxide in dimethylsulphoxide and 2-fluoronitrobenzene;

C) preparing 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride from the reaction product of step (B) by reacting with a slurry of 2-(2-nitroanilino)-5-methyl-thiophene-3-carbonitrile in ethanol and a solution of anhydrous stannous chloride in hydrochloric acid;

D) preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine by refluxing the reaction product of step (C) with a mixture of N-methylpiperazine, dimethylsulphoxide and toluene.

26. (new) A method of preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]-benzodiazepine comprising the following steps:

A) preparing 2-amino-5-methylthiophene-3-carbonitrile by mixing sulfur, propionaldehyde in dimethylformamide, then adding triethyl amine, then adding malononitrile;

B) preparing 2-(2-nitroanilino)-5-methylthiophene-3-carbonitrile from the reaction product of step (A) by reaction with aqueous sodium hydroxide in dimethylsulphoxide and 2-fluoronitrobenzene;

C) preparing 4-amino-2-methyl-10H-thieno[2,3-b][1,5]benzodiazepine hydrochloride from the reaction product of step (B) by reacting with a slurry of 2-(2-nitroanilino)-5-methyl-thiophene-3-carbonitrile in ethanol and a solution of anhydrous stannous chloride in hydrochloric acid;

D) preparing 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine by refluxing the reaction product of step (C) with a mixture of N-methylpiperazine, dimethylsulphoxide and toluene.